

Road Diets

4-Lane to 3-Lane Conversions



National Experience

- Urban/Suburban use (avg. pop. 269,000):
 - Washington & California (19% crash reduction)
- Smaller Towns (< 17,000) in Iowa:
 - 47% crash reduction
- Average of 29% reduction in total crashes all environments

2011 FHWA Proven Safety Countermeasures

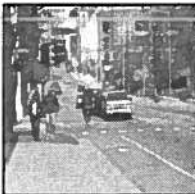
- For pedestrian benefits

- Guidance:

- 20,000 ADT or less

- Considerations:

- Driveway density
 - Transit routes
 - Total number of intersections along route
 - Other operational characteristics






USB-131 (Division Ave), Grand Rapids

Michigan Experience

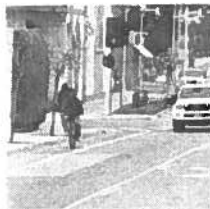
- In use since 1988
- ADT up to 21,000 (M-43, East Lansing)
- MDOT & local agencies:
 - Over 100 sites: 90 miles converted
- For MDOT locations:
 - In partnership with the local agency
 - Traffic analysis to determine feasibility

Potential Crash Reductions

- Left turn crashes 
- Side swipe / Head on crashes 
- Angle crashes 
- Pedestrian / Bicycle crashes
- Other

Pros

- Liveable, walkable and bikeable communities
 - Complete Streets
- Can reduce significant injury crashes
- Economically implemented / Low cost
- Efficient left turns
- Intersection sight distance
- Fewer conflict points
 - Improves senior mobility
 - Inexperienced drivers



Cons

- Possible delays at:
 - Minor side streets, driveways
- Possible increase in rear-end crashes
- Widening for major intersections
 - Need for traffic analysis
- Construction method
 - Adjusted curb lines – makes road diet permanent



Considerations for Conversion

- Request from Local Agency
 - Traffic analysis required
- Reduce left turn crashes
 - Especially fatal and serious injury
- Traffic calming – reduces weaving
- Pedestrian / bicycle accommodations
- Results of a traffic analysis



Partnerships on MDOT Routes

- MDOT initiated:
 - US-2 in Iron River (2008)
 - US-2 in Bessemer (2008)
- Local Agency initiated:
 - M-82 in Fremont (2008)
 - M-140 in Covert (2009) at the request of enforcement
 - US-31 BR in Whitehall (2011)



Questions?
